# Biocomplexity of Avian Disease Vectors

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*Culex quinquefasciatus* feeding on an amakihi.

## Objectives:

- ☆ Monitor mosquito abundance and infection rates
- ☆ Record and relate climate to mosquito and disease dynamics
- ☆ Examine the role of host-vector interactions in transmission

## Accomplishments:

- ☆ Completed three and a half years of mosquito sampling
- ☆ Documented year-round transmission at low elevation
- ☆ Recorded differences in the defensive behaviors of native and alien birds

## Significance:

- ☆ Vectors may be the weakest link in this avian disease system
- ☆ Mosquito demography may drive the local evolution of tolerance in birds
- ☆ Relevance to emerging West Nile Virus and Dengue Fever